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## A study of Hamburg shipping in the past

## DIE WELT

Since boyhood Walter Kresse has been fascinated by ships. When he was growing up he went endlessly to Hamburg's quays and wharves. Since he was 15 years of age Walter Kresse has been interested in ships, which brought a breath of the wide world to the Hanseatic city. He knew by heart the names of the shipping companies and stories about the old sailing vessels.

Many times he visited Hamburg's Historical Museum and pressed his nose against the glass cases to read the notices about brigs and brigantines, full-rigged ships and salpetre barges. He looked at the ships closely and went home to build models of them as precisely as possible.

A passion for detail haunted Walter Kresse. This almost obsessive attempt to achieve precision together with a scientific education are the two qualities in Walter Kresse that have enabled him to collect together the items included in the register entitled *List of ships in Hamburg shipping companies from 1765 to 1888*.

This register is not just a cold catalogue of dates, ships and shipping companies. It is an exciting mirror of the maritime activities of Hamburg whose seafaring tradition stretches back for many centuries.

For eight years Walter Kresse has bent over dusty files, valuable books, yellowed ships' papers, harbour documents that

were almost unreadable and many other sources. He has studied more than 10,000 documents giving the names of Hamburg's ships. He has also included vessels from neighbouring areas that were once 'dependencies' of the great Hanseatic city.

Bit by bit Herr Kresse has collected together details from archives in Paris and Antwerp, from Hamburg's city archives and from material available in the city's commercial library.

Hamburg is the only major port that has assembled so complete a register of shipping with the exception of London. In London there is a register that dates back to 1741. Shortly this register will be printed. These researches will have cost approximately 20,000 Marks, but to experts they will be considered remarkably inexpensive.

Walter Kresse is an economist. For his the is he wrote a paper entitled, "Possibilities of direct sea connections from Baltic ports".

Professor Walter Hävernack of the Historical Museum read Walter Kresse's work. The Professor immediately called up Herr Kresse and asked him if he would devote his talents to the benefits of maritime history. Kresse agreed and began to delve into libraries and archives gathering his information. The Federal Republic Research Association provided the funds for this investigation into German shipping in the seventeenth and eighteenth centuries.

The work not yet completed, Walter Kresse does not take a busman's holiday



Walter Kresse, investigator into Hamburg's maritime past

(Photo: Conlin)

by the sea, but spends his vacations in mountainous areas. He studied, first of all, the extensive material provided by shipping registers between 1765 and 1823.

In another three years' time work will commence on studying material from the years up to 1888.

Who is interested in old information from olden days such as this?

Who would like to know what political and economic influences affected the growth and development of Hamburg's merchant marine in the olden days? To whom do the names Tönnies, Ackermann, Gabo, Roosen, Schröder, Godeffroy and Wappäus mean anything?

Is there still any interest today in the fact that ships bearing the flag of Hamburg sailed into American harbours between 1781 and 1823?

Dr Ulrich Bauche, custodian of the Historical Museum, added, "We are very

happy with Walter Kresse's work. Although we can answer the numerous questions which are always being asked accurately and fully."

Questions come from firms that would like to chronicle their own history, from old Hanseatic families who wish to trace back their ancestors and from previous generations ran their ships' lines, from people studying for degrees and from lovers of ships and shipping.

But above all Walter Kresse's work is the foundation for scientific study of the history of the Western European Union. The importance of the work should not be underrated. Part of the praise came for nautical expert from Bremen. A keeper of archives at the port on the Weser greatly regretted that Bremen had nothing of the kind. If it had, from Bremen says so then it must be

(DIE WELT, 27 November 1969)

## The key in the coat of arms

DIE ZEIT handles facts like stones in a mosaic, patiently, carefully and minutely marshalling individual facts to provide comprehensive background coverage of what goes on.

An independent weekly, DIE ZEIT need not rush into print on day-to-day events. It has none the less decided opinions on the issues behind them. Watchful and critical in political affairs, committed on the arts and sound of judgment on matters economic and financial, DIE ZEIT is indispensable to people who care what happens to them. It is a newspaper for thinking readers. Write for free sample copies.

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Expectedly harmonious progress of the talks. Basically they are all mere preliminaries, skirmishes prior to crucial decision at which the going will be hard.

Above all they represent a struggle for good starting bay at the European conference proposed by Moscow. The talks are eagerly awaited. Despite negotiations still current in the West the conference will take place - in 1971 if not in 1970.

Yet even though the progress achieved in talks between East and West has so far been more atmospheric than substantial, the improved atmosphere is worthy of note.

Future, more difficult negotiations can be easier now that the tone of discussion between various countries and groups of countries.

Premature and exaggerated optimism international discussion has become more

proclaimed by both President Nixon and leading Soviet spokesmen the era of negotiation that was to succeed an age of military confrontation seems now to be dawned.

In this final month of the year an exchange of contacts and conferences has taken place in East and West and the two. In all instances attempts are being made to devise guidelines for international politics in the coming year.

The Common Market summit in the Hague, the Nato conference in Brussels, the Warsaw Pact meeting in Moscow, the Council of Europe in Paris, the Soviet strategic arms limitation talks in Helsinki and, finally, the talks between Bonn and Moscow on renunciation of force are but the most important of a flood of conferences.

To everyone's surprise nearly all these meetings are reported to have been good or satisfactory for all concerned. Little has been heard, though, of any specific results.

There is, no doubt, a simple reason for the scarcity of information and the

## Hannoversche Allgemeine

reasonable and hope is growing that peaceful coexistence is not just a catch of any kind is not only uncalled for but dangerous, though. It would be bound to lead to disappointment that would be far harder to digest in the Western democracies with their tradition of frank discussion than in authoritarian-ruled communist countries of the Eastern Bloc.

Encouraging the development of unwarranted optimism of this kind may well be part of the Soviet negotiation strategy. The Nato Ministers meeting in Brussels were right to adopt a cautious approach and not without reservations give the go-ahead for talks on the European security conference demanded by Moscow.

They had every justification for pointing out that inadequately prepared formal discussion of a security agreement in Europe could easily lead to disappointment and even a worsening of relations.

There is no point in closing one's eyes to the difficulties that are bound to arise in negotiations between the major ideological blocs in Europe as soon as substance, compromise and concessions are involved.

Wants and ideas in East and West in connection with a European security agreement or even a renunciation of the use of force between Bonn and Moscow still differ considerably.

The group of countries behind the Warsaw Pact would like any agreement first and foremost to recognise and consolidate existing frontiers and the political status that emerged after the war. In the final analysis, as Soviet party leader Brezhnev frankly admits, the aim is to bring about social changes in Western Europe.

The West and the Federal government in Bonn in particular aim, on the other hand, at improving the status of West Berlin and persuading Moscow to forgo its claim to a right to intervene in this country's domestic affairs.

No one side is prepared to make concessions only. Both want to gain counter-concessions from the other in the process. Heated debate is bound to result.

To begin with, though, the United States and the Soviet Union will harmoniously bring their preliminary talks in Helsinki to a successful conclusion, declaring when and where the negotiations are to begin and what types of strategic weapon are to be the subject of limitation talks.

It is by no means certain that the negotiations will be as harmonious as they have been in Helsinki when it gets down to brass tacks.

Critical American observers have already sounded a warning note. Washington's negotiating position, they maintain, is by no means as good as is generally assumed in the United States to be the case.

## Era of negotiation succeeds era of military confrontation

A WEEKLY REVIEW OF THE GERMAN PRESS

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January, will soon show whether or not such expectations are justified.

A second test case of the Kremlin's real intentions and thus a yardstick of the Brandt government's new policy towards the Eastern Bloc and its prospects is the talks between Bonn and Moscow on renunciation of the use of force.

They are of mainly psychological importance and intended not only to be a key to Bonn's general rapprochement with the East but also as a means of gaining Soviet support for its main aim of coming to a tolerable modus vivendi with the Eastern Bloc countries.

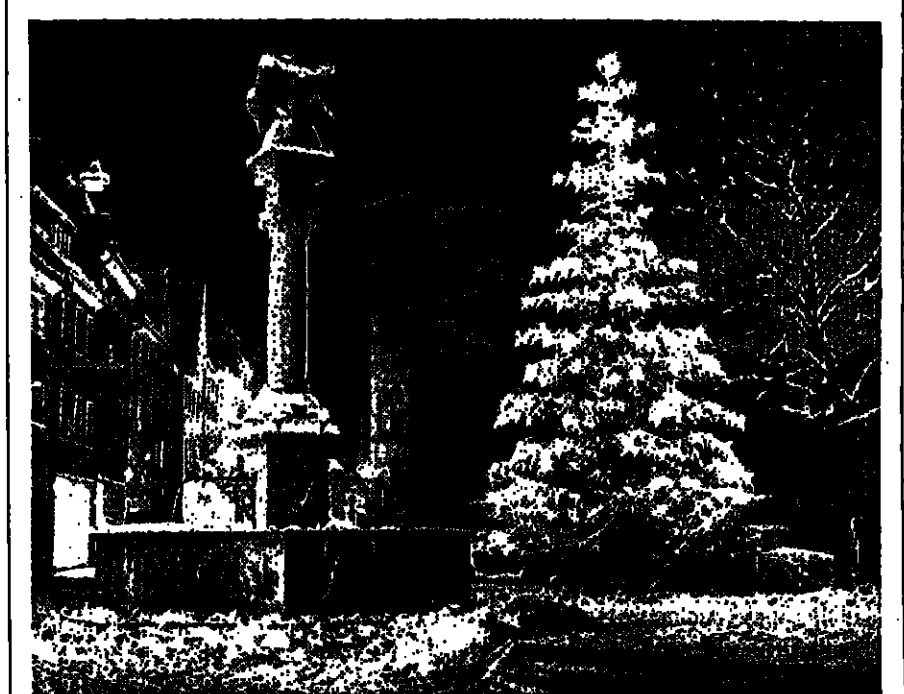
The strange reaction to the surprise commencement of the Moscow talks in a number of French and British newspapers is some indication of the delicate terrain the Bonn government is approaching. Commentaries recalled not only Rapallo but also the Hitler-Stalin pact.

Even so it is right for political endeavours to defuse European points of crisis to be made alongside pure arms talks. President Nixon pointed out the connection months ago when he gave the Soviet government to understand that in his view it would serve neither American nor Soviet interests for the two powers merely to talk about strategic arms without making progress on potentially explosive political differences of coping.

In other world hotspots - the Middle East, Vietnam and Cuba, for instance - the Kremlin does not appear to be interested in a relaxation of tension at the moment. This may be for tactical reasons, but does Moscow feel differently about Europe?

The progress of talks over the next few weeks will perhaps provide an interim answer to this question but years will pass before agreement is reached on the West's proposal for a mutual reduction and withdrawal of Nato and Warsaw Pact forces.

Alfred Illdebrand  
(Hannoversche Allgemeine, 13 December 1969)



Snow lies thick over the village of Wangen in the Allgäu. Here, as in all other parts of the Federal Republic citizens are preparing for the Christmas celebrations. The editors and staff of THE GERMAN TRIBUNE wish their readers a happy, peaceful and constructive New Year.

(Photo: Archiv / W. Stahler)

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DIE ZEIT  
WOCHEZETUNG FÜR POLITIK, WIRTSCHAFT, KUNST UND LITERATUR



## FOREIGN AFFAIRS

## Bonn must not bite off too much in East talks

Frankfurter Allgemeine  
ZEITUNG FÜR DEUTSCHLAND

Care is being taken in Bonn not to read too much into the negotiation offer made by Czechoslovak party leader Gustav Husak. It is accompanied by harsh words that at first glance convey the impression of being conditions.

Not until the situation is a little clearer and one term or another is interpreted a little more explicitly will Bonn be able to respond favourably.

It is not that Bonn is not willing to intensify exchanges with the Czechoslovak and other East European governments. Far from it.

In Bonn and the country as a whole people would be only too pleased if relations with Prague were to be rid of a number of relics of the past and brought closer to a normal, neighbourly footing.

But Prague should be allowed to take its own time, and it will be a long time before what would be a most desirable normalisation of relations can succeed.

This is not to say that First Secretary Husak's initiative is either premature or unwelcome. It is to be seen against the background of a general trend on the part of Eastern Bloc countries since last spring to forge closer economic, technological, scientific and touristic contacts with the more highly developed countries of the West.

This country is not the only target. The Federal Republic's economic potential is the crucial factor the pendulum swing towards Brandt and Scheel is nei-

ther here nor there. It is not sympathy but interests that count.

Last spring the Soviet Union had to allow the Eastern European people's democracies this opening to the West and greater leeway. It was itself no longer in a position to assist the capital-hungry, capital goods-starved people's democracies with loans and aid of other kinds.

The upshot was Gomułka's approach to Bonn on 17 May. Husak is now trying to follow suit.

The Soviet government could hardly oppose the trend. It was itself out to find additional means of boosting economic development. The natural gas and pipeline deals with this country are cases in point.

It remains to be seen whether and when economic aid will lead to political activity. For the time being scepticism is advisable.

The Gromyko-Allardt talks on renunciation of the use of force, for instance, are anything but sensational. Their commencement has been vastly overrated, especially abroad. They represent but a further stage in negotiations that have been in progress for years and may well drag on for months.

In Moscow and the East in general all that has happened so far is an improvement in the climate of relations. Substantial changes have yet to occur.

What is more, as far as the Soviet government is concerned contacts with Bonn have been far overshadowed in political significance by the Helsinki strategic arms limitation talks with the United States.

For a variety of reasons the Russians are extremely interested in the Salt talks and everything else in the way of East-

West relations pales in significance before the Helsinki negotiations. The people's democracies may be able to gain additional leeway as a direct result.

For some time to come Czechoslovakia will no doubt have the least elbow-room, certainly as regards relations with this country now that Bonn is showing willing.

Husak will have noticed at the last Moscow summit how far Gomułka is now prepared to go, however, and wondered whether Czechoslovakia could afford to miss the boat.

The Polish leaders have secured the approval of their Eastern allies for an extension of economic agreements with this country and political talks are shortly to begin. East Berlin was unable to halt the trend.

Warsaw's reply to Bonn's probes has yet to materialise but an answer is expected before Christmas.

The second round of talks, which should be over by Christmas at the latest, will by no means bring negotiations with Poland to a conclusion. Besides, Common Market consent must then be secured for a longer-term framework agreement. Bonn has high hopes of gaining approval but the Brussels technocrats will not be slow to voice their misgivings.

Prague will take careful note of the progress of economic talks with Bonn before itself deciding to make the next move. This wait-and-see approach has its advantages, too.

The Federal government could and should first concentrate on contacts with the Poles. Disregarding the Moscow talks for a moment, negotiations with Warsaw merit not only priority but also careful tending by Bonn diplomats.

Once negotiations with Warsaw have come to a successful conclusion ways and means of reaching agreement with Prague and Budapest will be found. In dealings with the Eastern Bloc Bonn cannot afford to bite off more than it can chew at any given moment. But Husak's gesture has been noted and welcomed. It is gratifying indeed.

(Frankfurter Allgemeine Zeitung für Deutschland, 12 December 1969)

## Helmut Allardt - formidable diplomat entrusted with delicate task

This country's 62-year-old man in Moscow, Helmut Allardt, who was the butt of criticism among political circles in Bonn for his handling of the signature of the non-proliferation treaty, has been entrusted by the Federal government with the task of conducting the first round of talks with the Soviet Union on an agreement to renounce the use of force.

These difficult and far-reaching negotiations represent the second attempt since the establishment of diplomatic relations with Moscow in 1955 to achieve a major improvement in post-war relations between Bonn and the Kremlin.

Allardt's qualifications to conduct negotiations of such importance comes best to light in a comparison with his predecessor, the late Hans Kroll, whose popularity among advocates of rapprochement between the two countries can only be accounted for as the result of insufficient acquaintance with the true state of affairs.

For talks with such hard-boiled negotiators as the Russians it is advisable not to possess personal characteristics by which the Soviet Union sets little store in the selection of its own diplomats.

A sense of self-importance, personal ambition and the resulting inclination not to obey instructions to the letter are high on the list of these negative qualities, all of which Hans Kroll possessed to a high degree. For the Soviet Union they made him easy meat and consequently popular as an opposite number but they

were hardly designed to earn him genuine respect in Soviet eyes.

Allardt is made of altogether different stuff. A tall, slender diplomat whose voice alone - cool, considered and discreet - gives him more time to reflect than the blustering, irascible Kroll, he conveys the impression of responding to the importance of the task entrusted to him in the form of a kind of dutiful determination to succeed.

His wary objectivity, always essential in Moscow, leaves his Soviet opposite numbers with no opportunity whatsoever of playing on his own personality in the negotiations and so making him a potential weak link as far as his own government is concerned, which was almost invariably the case with Kroll.

On taking over from his brilliant predecessor, von Weizsäcker, who had reached retirement age, Allardt could hardly in the circumstances have been said to have a profound knowledge of Soviet problems or even of the Russian language.

To this day deeply disinclined to engage in speculative analysis of any kind, Allardt succeeded in a very short space of time in acquiring a knowledge of difficult and no doubt unaccustomed material sufficient for the task in hand.

Allardt is, by the way, no newcomer

to East-West diplomacy. From November 1962 to March 1963 his first official mission in the Eastern Bloc as head of the commercial section of the Foreign Office was the leadership of the Inter-Ministerial delegation in Warsaw that after five months of negotiation signed the first official trade agreement between this country and Poland and put into practice a concept of setting up trade missions in Eastern Bloc countries.

Unfamiliarity with the Russian language, often made out by people who know no better to be a handicap, is virtually irrelevant for an ambassador in Moscow. As Clausewitz said, a general need not know how many parts a gun has but he must know how far it will shoot.

When all is said and done Allardt has fairly good contacts with high-ranking Soviet officials. He recently entertained chairman of the Soviet trade union confederation and politbureau member Alexander Shelyepin and eleven other members of the trade union central council.

In the long run the unassuming way in which this country's present ambassador in Moscow attaches not the slightest importance to the sidelines and outward appearances stands to gain him Soviet sympathy not as a diplomat but as a host.

With the aid of these qualities Allardt has succeeded in a relatively short space of time in overcoming reserve, something difficult for any German in the Soviet Union, and earning regard and respect.

(STUTTGARTER ZEITUNG, 11 December 1969)

## All out effort 'peace research'

Federal President Gustav Heinemann would willingly visit the People's Republic of Poland provided diplomatic conditions had been established and visit rendered possible, he said. First, he said, Bonn and Warsaw "talk properly."

Asked whether he advocated discussions with the Poles as a current wave of anti-Semitism, the President replied that this would be in a better position than Polish Jews once talks had got under way. Heinemann stressed his interest in first visiting neighbouring countries during the war and was visited by a German head of state.

The Federal Republic, he said, to be on as good terms with the West. It should have had been the case had been one of the for his clash with Konrad Adenauer. Mistrust of Bonn's new president and later with Ludwig Erhard Heinemann maintained. He said, moreover, that it had the exposure of the Western Allies.

Foreign Minister Walter Scheel, when the President of the Federal Republic spoke to the parties about the Social and Free trade coalition is willing to examine the possibility together with the government in Prague.

A matter of hours after the First Secretary Husak's interview, reiterated, in an interview with Welle, the Federal government's good relations with all Eastern Bloc countries, including Czechoslovakia.

The day after Gustav Heinemann's visit to Prague, the Czech Republic's willingness to state organisation had its own executive committee, its own new work groups it has all the normalisation can hardly be expected about. Bonn has yet to do the Munich Agreement null and void that it entails.

(Frankfurter Rundschau, 12 Decem-

## POLITICS

## The future relationship of the CDU and CSU - an open question



Franz Josef Strauss

(Photo: Archiv)

twenty years standing that CDU and CSU members of the Bundestag do form one parliamentary party, but there is no reason why it should be considered a matter of course that this will continue.

It is also a twenty year old tradition that the CSU does not exist outside Bavaria and that the CDU does not operate in Bavaria. The sister parties have marked off their own territory and do not want to get in each other's way. But opinions have been expressed in CSU headquarters that it is not absolutely necessary for the party to feel itself hemmed in by the state borders of Bavaria.

These rumours have not to date been taken very seriously by the CDU or even the CSU. But now under the auspices of Franz Josef Strauss the CSU seem to be on the point of spreading their

wings. Mistrusting people in the CDU are of the opinion that their allies could be extending their scope over the whole of the Federal Republic.

The opinions of other people show that an expansion of the CSU out of Bavaria could tax their financial and organisational capacity. On top of this in the election campaign Strauss found little sympathy in northern areas of the Federal Republic.

Earlier on the CDU in Lower Saxony had shown a certain tendency would not have such an easy time in these areas as Strauss once thought. And if Strauss can rattle up several CDU voters who would prefer to vote CSU if the other hand to find voters in Bavaria who would prefer to vote for the Christian Democrats rather than the Christian Social Union.

Needless to say a CSU in Lower Saxony or even North Rhine-Westphalia would counterbalance a Bavarian CDU.

Richard Stücklen has said that the CSU allies are not trying to lure members away from the Christian Democrats. The CSU would like to increase its influence within the CDU just as its Federal state organisation would like to make greater use of their power within the whole parliamentary party.

When Stücklen says that these CDU allies in the CDU wanted to do active work in the CSU's policy making he must mean that they wish to be spokesmen of this policy in the CDU. He is obviously assuming to himself that CDU policy and the policy of the CSU in the joint Opposition will not always agree.

CSU chairman Franz Josef Strauss is calling for a strong Opposition. But at the same time there is a good deal of uncertainty about Strauss. Once again he is convalescing and trying to get over his broken arm and his plans for the future are not clear to anyone since they are presumably not yet clear to him.

Even his colleagues in the CSU cannot say whether Strauss aims to become a minister in the Bundestag again, Prime Minister of Bavaria or one of the top men in economics.

But it is clear that he wants relentless opposition in Bonn to the Brandt-Scheel government's inter German Relations' policy and policy towards the East Bloc. He rejected the idea that the CDU should be an integrated middle-of-the-road party. Though Strauss shows no anxiety about the label "conservative" the CDU does.

The CDU is not moving towards the left. But the CSU is remaining to the right of the Christian Democrats. The test case

## State of the Nation speech to be given on 14 January 1970

Willy Brandt will give the first state of the nation report on 14 January 1970 in the Bundestag.

The Council of Elders in Bonn said recently that the debate would last until 16 January.

The Bundestag has just commenced its Christmas recess which will last until 1 January. (DIE WELT, 9 December 1969)

for the extent of this trend and for its success or failure will come with the Bavarian elections in a year's time. It has been proved that in Bavaria a party which shows itself to be independent in Bonn is gaining an advantage. Proof for this comes from the attitude being adopted by Bavarian members of the SPD parliamentary party, even though this does not go very far.

But if the election in Bavaria supports the CSU's new trend it will not longer be at all possible to give a different answer about the future relationships of CDU and CSU. Everything will remain the same.

Alfred Rapp

(Frankfurter Allgemeine Zeitung für Deutschland, 10 December 1969)

## Free Democrats and their future as a party

easier if the new government were to develop some successful policies and destroy some of the prejudices against it.

What may also be considered certain is that a fair percentage of the electorate which would have given its votes to the FDP finally decided to vote for the SPD since, after twenty years of CDU-led government they had decided it was high time for a change of government.

Of these a large number must have been members of the younger generation and the middle-aged who connect liberal ideas with progressive ideas. It is a distinct possibility that a good number of these would have maintained their loyalty to the Free Democrats or if they were not FDP voters would have joined the party if they had been made aware in good time and clearly enough that the party was resolved to coalesce only with the Social Democrats and not with any other party.

Now we may ask ourselves whether this group will ever find their way back to the FDP. Certainly not if the new government should founder as a result of failures of the FDP. What their attitude will be if the new government succeeds with the aid of the FDP is not so clear out.

Whatever road the Free Democrats

take, whether they return to the embrace of the CDU or form a decidedly loyal partnership with the SPD they will continue to find themselves in a less hopeful situation.

The skies around the Free Democrats have clouded over in every direction. This is also true in fact particularly true if the FDP should try to form a kind of opposition within the coalition.

It may come as cold comfort to the liberals that their dilemma, when considered from its bases, can only superficially be narrowed down to the question of how they should be planning their tactics to avoid losses on both wings.

The Free Democrats have not been a self-contained party for some time. Through long years of opposition they have represented a kind of latent coalition of at least two manifestations of liberalism, which in German history have spent more time split than allied. In Bismarck's empire they were the Progressive and National Liberals, in the Weimar Republic they were the German Democratic Party and the Deutsche Volks-

partei. This leads up to another consideration. There is a certain amount of liberal

conceptions and aims which has found a footing and spread in the other parties. This must put the question of the existence of an independent liberal party more and more in doubt.

The independent liberal parties have at least served one purpose in that they have provided a liberal challenge to other parties, even if this is not a justification in itself for their existence. Lately however large sections of the SPD including many of its representatives have shown to be a left-wing liberal national party (Volkspartei).

The CDU's best chance to regain lost power is by extending its liberal tendencies rather than becoming a liberal-conservative national party. In these circumstances it seems that the liberal cause might best be served in welding the SPD into one social-liberal union. One preparatory stage for this might be a joint campaign for the next election and the promise of both parties to take over governmental responsibility. It may well be that the FDP is forced to this if it does not want to drop right below the five per cent level.

This would not be a happy event for devotees of liberal principles if it meant that a number of liberal politicians had to leave this country's politics for good. This is the vital factor in whether a party calling itself liberal continues to exist.

Manfred Thier

(STUTTGARTER ZEITUNG, 10 December 1969)

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DEUTSCHES ALLGEMEINES  
SONNTAGSBLATT, 7. December 1969



## ■ OPERA

## Francis Burt's 'Barnstable' premiered in Kassel

**Süddeutsche Zeitung**  
MÜNCHENER NEUESTE NACHRICHTEN

No venerable person has ever sung so beautifully and pratingly on an opera stage as in the hour-long one-act opera *Barnstable* or *There's someone on the Roof* (after James Saunders) by the 34-year-old Francis Burt, an Englishman now living in Vienna.

After the complete downfall of the house of Carboy he sings, "There is providence and everything is as it should be." Cocoa is still served on time, but by the mistress of the house and no longer by the maidservant whose nerves are as frayed as those of the daughter who finally no one bothers about any more. These two girls' warnings against impending doom were in vain.

People shoot at thrushes and afterwards fireplaces collapse but the normally subtle super-British ignored this. And we are all related to them in some way or another according to the composer in the excellently produced programme.

The exaggeration of what we in this country call restraint into complete dourness is a typically British quality even though we cannot deny that there were and still are tendencies here to consider tradition, propriety and the citizen's duty to keep public order as the utmost wisdom even in times of turmoil.

Anybody who learns from catastrophes could have come out with the alternative title of *Autumn's Damsel*. People indulging in understatement have to deny the existence of an invisible, mysterious person called Barnstable who is obviously up to some mischief on the roof. The person cannot fit Barnstable in with the world as he sees it. He emerges from the debris of the downfall with a sweet smile on his face and platitudes on his lips. For him the world has not changed a jot.

Francis Burt has mastered the difference with a subtle stroke of genius. For Barnstable he chose a twelve-note series. He claims that the rigidity of this compositional method would be a good way to characterise the superhuman man to gether with electronic notes. This thought is dangerous especially as it is confronted here by life on the realistic level, connected with tonality.

Recently the avant garde or at least those who used a twelve-note series said that tonality was unreal and dead. But the tonality of Burt's dour characters is so melodic, almost reminiscent of Strauss, that this does not seem to be true. Or does yesterday's dour attitude in the drama correspond to traditional musical composition? Burt plans and stratifies his tonality so that the restoration is interrupted. There remain points for discussion. Whatever the stylistic and dramatic aspects the significance of this is of decisive importance that Burt fuses the two levels. The Barnstable music is supported more and more by the music signalling the decline. It penetrates into the sphere of tonality, changes its function. At the end we hear a delicate twelve-tone lyrical air to remind us of the more or less complete metamorphosis of the Carboys.

The musical transformation makes Burt compelling listening. At the beginning the score was clumsy and the libretto difficult to understand because the

orchestra had too much to do. The result could be nothing other than a lack of tension.

Hilde Spiel's translation of the libretto would have helped — but it simply could not be heard. A good part of the blame must be borne by the soloists, but the high pitch and the colourful though not always clear music cannot be completely exonerated. The electronic parts did not contrast with this enough and obviously the technique needed for a solution was lacking. The music from the loudspeaker merged more easily with the instruments than with the voices.

All in all, we are one more successful one-act opera. It can and should be put on many stages in spite of difficulties of producing these half operas even in the largest and technically most efficient opera houses. There are plenty of good operas with which it can appear. In Kassel it was performed with Puccini's *Gianni Schicchi*.

It remains to be seen if Burt is able to progress to a whole-length grand opera after his *Barnstable*.

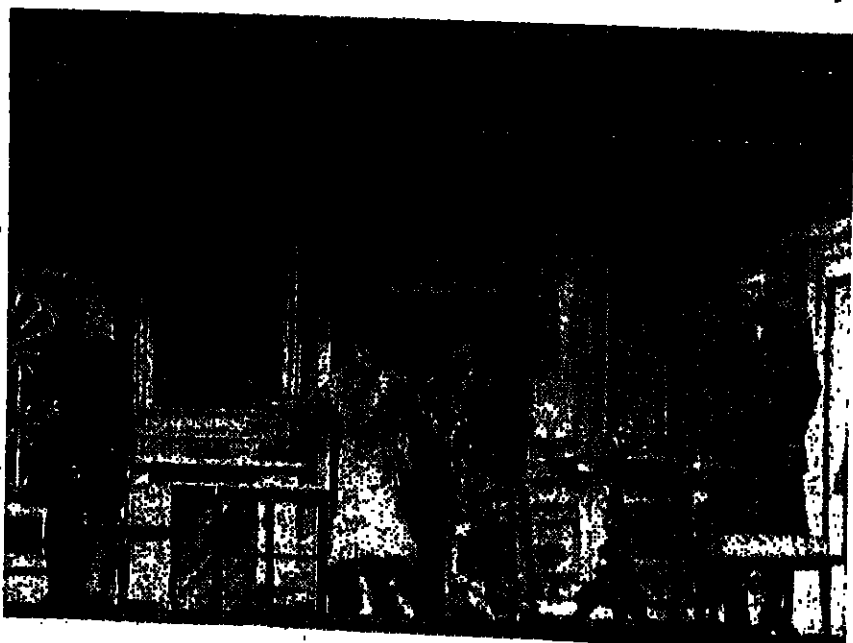
Stage technicians at Kassel got into some difficulty when it came to demolishing piece by piece Carboy House, built in the style of the nineteenth century by Thomas Richter-Forgach. First cracks appeared, the walls became looser, holes appeared in the floor, everything came apart and a canopy of many-coloured dust settled. Those inside forced their way out unhurt and happy. The only thing the audience saw of the daughter were her legs sticking up in the only window frame left intact.

Bohumil Herlischka's production was more brilliant than ever apart from a few gags that he had added and a few misrepresentations. He concentrated on characterisation of the simplest sort. It was so precise and the typical gestures of those involved — the person for instance — were so accurate that it is no exaggeration to speak of it as one of the most sound and valid operatic productions of recent times.

The ensemble, competent without being exciting, had rehearsed well. The way Gerd Albrecht conducted was exactly half-way between cool distance and emotional involvement. The music was balanced and the abundant melodies came through authentically and effectively.

The evening of the premiere was well worth attending from both visual and musical points of view. Those present can attest to this.

Wolf Eberhard von Lewinski  
(Süddeutsche Zeitung, 3 December 1969)



A scene from Burt's 'Barnstable'

(Photo: Sepp Bär)



Margot Werner as Lady S and Heinz Bosl as Casanova in Egk's ballet

(Photo: Rüdiger)

## Egk's ballets are undemanding

Werner Egk's ballets *Joan of Tsarissa* and *Abraxas* were both written in the forties and have both become popular in this country.

They both have one advantage. Mediocore ensembles can cope with the ballets under not so talented choreographers. All the choreographer needs is a little stage instinct.

Both works contain roles that prove profitable though without laying too much claim to dancing ability.

This successful formula of the forties has in the meantime lost all its charm and piquancy. There has been too much change on the ballet scene, in this country too.

Werner Egk's latest ballet *Casanova* in London consists of ten scenes and recently had its premiere in the Bavarian State Opera in Munich. Egk himself conducted. It appears as a novelty of yesterday, a sullen reminiscence of his early ballet works.

The music suggests no new possibilities of movement to the choreographer. It only forces him to reel off a series of actions that contain an immoderate amount of originality and result in the ballet degenerating into a series of arid and foolish steps and gestures.

Egk has his Casanova move from scene to scene. But all the scenes have one thing in common. They present too little op-

portunity for choreographic music which the work could justify itself.

Egk's scenes are illustrative, but Brecht tradition a screen appearance scenes and on this is projected the next scene. This is what Brecht has described as epic ballet.

But throughout the work there is a dance that attains any status of art. And this is not only the fault of the choreographer, Janine Charnat.

Egk's score has few rhythmic lights. It has none of the very stormy energy of his earlier compositions. It is a result of the good contact he always sound as if the composer proud of them even though there is reason for him to be.

The outline of the action is so simple that it can almost be done by a child. Egk's accidentally composed of again, and fused *Tsarissa* and *Abraxas* into Central episodes from both there are only slightly altered in *Casanova* how tricky relationships are at the There are the dice games, apparent seduction at the ball and dance mezzo offering theatre in the theatre.

But everything is marked by the decision of novelist, poet and dancer. Richard Grass to forge a closer alliance with him in an advisory function.

The choice of a chief dramatic adviser for Frankfurt has not yet been completed. Günter Grass will not take on this task, since it involves many facets and he would be unable to carry out his duties fully.

But the choice of a man for this position has already been prejudiced by the appointment of Grass as stage adviser.

This could be an advantage as long as someone can be found to fill this role who is strong enough not to be just a "yes-man" under Grass' and Münch's dictates.

At any rate the theatre now has someone with something to say to the audience and the critics. It is as being a long wait.

Peter Iden  
(Frankfurter Rundschau, 29 November 1969)

Volker Schlöndorff, Peter Fleischmann and Klaus Müller-Lau joined the production team of Hallelujah Films in Munich this autumn. They are planning an ambitious programme of documentary films about the Federal Republic. This idea for this was given to them by their Brazilian colleagues.

Members of Hallelujah Films have sent out a circular to other film producers with whom they are friendly saying:

"We are planning at Hallelujah Films to set up a working unit of young producers to produce one hundred documentary films in the course of two to three years.

"The films will be between ten and thirty minutes long and will have a theme in common, that is to say, Federal Republic society viewed in all its many aspects.

"We are not planning any kind of sociological research but the producers working on the scheme will be giving their view of the world around them.

"This work will be undertaken with the aim of forging a recognisable national documentary style for this country just as the Poles and the Brazilians have forged

## THE ARTS

## The future of the future lies in the present

**DIE WELT**  
UNABHÄNGIGE TAGESZEITUNG FÜR DEUTSCHLAND

*Funny Thing Happened on the Way to the Rubbish Dump* from Great Britain. In all 17 films from ten countries.

No surprise that a first prize winner could not be found. The Prix Futura, a golden trophy, was not awarded since only one film submitted corresponded to the demands made by the jury and the organisers of the competition.

A silver award went to the British film already mentioned which was praised as being just right for television and very constructive. The bronze prize went to Japan for an entry on the problem of artificial limbs exemplified by a thalidomide child (*The Hopes of a Young Girl*).

And with that the series of prize-

worthy contributions dried up although one or two interesting futuristic problems were debated.

Among other themes there was the problem of survival in space and the developments of new kinds of robots (both from America), the future in space (Italy), famine (Great Britain and America) and an entry on research into the enigma of the human brain (Italy). A part of the film entries was concerned with decidedly current matters. "Professions of tomorrow" by Rüdiger Proske and Max H. Rehbein, for example, belong on the television screen of years ago and not the present day.

The facts of a gigantic re-structuring of professional life cannot be brought home to young people soon enough. The chief problem with all the film entries was that the facts they present change and date amazingly quickly and what is true today no longer applies tomorrow. Every ten years Man's knowledge doubles.

With this tempo of change productions which have taken a long time in the making and may have needed two or three years from conception to completion cannot keep up with Man's progress. It was quickly determined that production methods in television must change.

The most appropriate formula for this state of affairs has been found by the futurologists John McHale of New York. He said: "The future of the future lies in the present."

One of the greatest success of this competition was that it gave a clear outline of the way in which science has progressed and information about it for public consumption has lagged behind.

Professor Christopher Jones, one of the team of scientists who had come to see the competition remarked disrespectfully that the films were so old they must have grown whiskers.

Enlightenment came in the afternoon discussion groups if not from the television broadcasts. The invitation to many prominent from this and other countries was certainly the cleverest idea of the whole competition.

The impression was given that England and America have a clear lead over European countries in their handling of material. This is largely due to the unconventional and unceremonious way in



The emblem of the 'Prix Futura'

(Photo: SH-B)

which the complex problems of the future are dealt with in Great Britain. There people seem far less over-awed by the huge revolutions which must most certainly come.

Accordingly the slogan for the first afternoon discussion group was "Anxiety in face of the future", but no one showed any anxiety.

This theme begs the question that the human being can not avoid being shocked by the future although a lot of work is done and must be done to head off this shock with information and enlightenment. One of the greatest contributors to this anxiety is, of course, the horror world of science fiction which paints an uncertain future in dark colours.

So we saw Spaniards manufacturing the idea of an artificial man (*Homo Maximus*), Swiss picturing the life of a single person in a fallout shelter and an American film showing a cell in which nine people were living from birth to death without ever leaving their 'home' and where the oxygen was rationed. Such films are hardly likely to stem the flood of anxiety.

The competition ran for four days and several times the theme recurred of how to apportion the riches of the world. Sociologists lead the way in pointing to an evolutionary development which will ease this problem. An Englishman, still very young, spoke of himself and his generation as just a transition phase towards the people of 2000 A.D.

Certainly an attitude such as this cannot be taken generally but it does go some way to expand the mind and become more aware of the future and more prepared to deal with it.

Lucie Schauer  
(DIE WELT, 29 November 1969)

## The Federal Republic on film

their own documentary style based on the principle of a communal viewpoint of a group of men towards their own country.

"These films will not be just a version of a writer's script, nor a sociological treatise, nor a newsreel, but an individual's towards individual events, groups or people, which reflect on the situation in which we find ourselves.

"Our planned modus operandi will involve the group of film makers regularly discussing the results of their work. We do not intend to produce 100 individual films but a composite using audio-visual means of outlining the nature of our society.

"The hundred films will be exported and should give a comprehensible and meaningful picture of the Federal Re-

public while at the same time showing how young producers from this country see the nation.

"The film teams will be as small and flexible as possible, working with 16 mm film in colour and with full sound recording with as little commentary as possible and the minimum of stage direction and editing.

"To date the following producers have agreed to join in this project: Erika Runge, Theo Gallehr, Klaus Müller-Lau, Werner Herzog, Volker Schlöndorff and Peter Fleischmann.

"The initial group of producers will do their utmost to expand the team of producers to about twenty. There will be as much cooperation as possible. Even during filming new producers will be able to join the group."

The cost of this project is estimated at between 1.5 million Marks and 2 million Marks. This is the first time such a project as this have even been thought of in the Federal Republic. It is to be hoped that the money can be found to finance these 100 short documentaries.

(Frankfurter Rundschau, 29 November 1969)



## ■ EDUCATION

## Teaching musical appreciation to 4-year-olds

STUTTGARTER  
ZEITUNG

Four-year-olds at 27 music schools in the Federal Republic have just begun a new syllabus for early musical training.

This country's Association of Music Schools has developed a new method for this course with learning and teaching material tailor-made to the child. A new musical instrument for children has also been developed in cooperation with the musical instrument industry.

Music schools have thus answered demands of educationalists and psychologists to shape a child before it starts school according to the stage to which its intelligence has developed and its natural talents. This means that abilities present in the child in the years before starting school do not remain underdeveloped. Public discussion about reducing the age at which a child starts school is also to be seen in this context.

With this programme of early musical training for four to six-year-olds the positive effect of musical education on the one hand and, on the other hand, the best age for learning—that is five or six—are being used in the teaching of basic musical knowledge. Until now musical education has not paid sufficient attention to opportunities of such early training.

ing or at least has not pursued them systematically.

Other countries provide perfect examples in this field. France has the *Ecole Maternelle*, the age of school entry in Britain is lower than here and children in both Japan and the Soviet Union are taught to play a musical instrument. Music schools in the Federal Republic are now trying to get basic musical education started earlier so that pupils can begin learning to play a musical instrument earlier.

The learning programme thus aims at an effective educational value of music and musical training at an early age. Children are introduced to music at an age and time at which they are not subject to other commitments and have a natural affinity to music. In this way they reach a standard of performance that enables them to play well for pleasure in later life or equips them for further training if music is to become their profession.

The content of the syllabus makes children conversant with musical techniques such as reading and writing music at an earlier age than normal as they are introduced earlier to a systematic training to play a musical instrument. The child thus reaches before puberty a standard of performance on his chosen instrument and a later divergence between musical desires and technical possibilities, as experienced today when young people play, can be avoided.

Music schools in this country are more

than just a musical kindergarten. The courses are run by qualified musicians who teach music systematically according to methods they themselves have developed. They are tailor-made for the child and the element of play is stressed.

The programme is arranged to last two years. Children start to learn at the age of four so that their basic musical training will be over by the time they enter primary school. At present teachers are being familiarised with the programme fixed for the first six months, in other words for the first twenty weeks. Every course is allotted 75 minutes a week and is attended by twelve children.

Apart from painting and drawing the lesson consists of games of movement, singing, recitations, acting, rhythmic and melodic hearing practice, instrumental practice on a keyboard or chimes and on percussion instruments such as drums, tambourines, triangles, cymbals and drums.

In the first six months children become acquainted with the keys of C, A and D and, rhythmically, with two note values, short and long or crotchets and quavers. In the next six months their knowledge is increased to five keys (C, A, D, F and G) and three note lengths, crotchet, quaver and minim.

After two years pupils will be conversant with the basic keys in the scale as well as the transpositions of C major, F major and E major. They will also be acquainted with crotchets, quavers, minims and semi-breves and also dotted crotchets and quavers.

At the beginning of the two-year course every child is given a school satchel with chimes, a musical primer, note-book and crayons. In every lesson the pupil receives a sheet with the new programme.

## Stone age drawing techniques with crayon for children

An old painting technique mastered by Stone Age Man in the caves of Altamira and the Egyptians in the reign of Pharaoh Tutenkamen is now enjoying growing popularity in art classes at schools in Bavaria. The method is crayon drawing.

Its most eager champion, Walter Weingart, a teacher from Hattenhofen, considers the wax crayon to be the best painting method for a child. It does not smudge, is easy to handle and the full, bright colours often spur the children on to surprising performances, even though many of them had failed in watercolour painting. This is not surprising as this technique is supposed to be one of the most difficult.

As Walter Weingart is a specialist in crayon painting and drawing technique he

Cooperation from the mothers is essential. What the child learns at school should be consolidated at home.

Musical schools participating in a programme of early musical education receive the same unified teaching material and use the same instruments. Children too receive the same learning material. This programmed musical education has begun in 27 music schools each with two courses and occupying altogether 1,300 children was made possible.

Cooperation between this country's Association of Music Schools and the musical instrument industry. Especially the industry. They financed the development of a programme of this type and supplied the music schools with all the necessary equipment.

When children finish this two-year "preliminary" course they will be able, at the age of six, to start playing a musical instrument such as the violin, cello, piano or recorder.

Their progress will be relatively fast. They already know the notes and the values and will be able to concentrate on the instrument itself. A feeling of music is an important stimulus here. Anger, joy, sadness, fear, excitement, all these feelings who can play one instrument fairly well. The recorder is a good first instrument to prepare the child for future instruments and it is particularly suited to the child. The trumpet, horn, flute and clarinet can be learnt from the age of ten, the oboe, bassoon, trombone and double-bass from the age of twelve.

Apart from the piano it is melodic orchestral instruments that are preferred by the young. Playing in an orchestral musical group is a great spur, even to individual practice.

STUTTGARTER ZEITUNG  
22 November 1969

gives lectures to educationalists on behalf of the Ministry of Education. He asks them to introduce crayon painting into their lessons so that children come to art classes twice as willingly.

But Weingart does not only give advice. As a talented painter he demonstrates to young teachers and headmasters how it is done. He takes along to each lecture a briefcase containing around one hundred crayon paintings by "his" children at Hattenhofen. Weingart says: "Sometime I will take a few of these along to an exhibition of modern art."

He is convinced that the work of his twelve-year-olds from the small eight-hundred-strong village near Fürstentum would be exhibited.

(Münchener Merkur, 1 December 1969)



Young children playing in a recorder band during a music lesson

(Photo)

## ■ IMMUNOLOGY

## Investigating organ transplants without risk

REDUCING REJECT MECHANISM BY CROSS BLOOD TRANSFUSIONS

STUTTGARTER  
ZEITUNG

Modern transplant surgery has without doubt achieved epoch-making successes. Skillful operations such as the heart transplant that made a name for the cheerful South African Dr Christian Barnard are almost common place today even though great precautions are taken in many places. For up to now nobody has succeeded in mastering the real danger of these transplants—the reject mechanism of the recipient's body against the donated organ.

Apart from specific cases—for example where tissue protein is the same in both donor and recipient, where twins from the same ovum are concerned or where bloodless tissue like a cornea is used—it is necessary to keep the defence mechanisms of the recipient's body in check for the rest of his life. This normally demands continual treatment with drugs and other medicaments.

Formerly X-rays were used in an effort to suppress the recipient's rejection mechanisms, but this caused extremely harmful side-effects. Today it is usual to use cytostatic like azathioprine or cyclophosphamide. These prevent cell division and are already used successfully to treat cancer.

The most modern means are the anti-lymphocyte sera that are also used against leukaemia. They check especially the main agents of rejection, the lymphocytes in the blood.

All these drugs restrain not only the rejection of alien protein in transplants but also other defence mechanisms, such as those against harmful microbes. That means that patients continually treated with immunosuppressive drugs are subject to all possible infectious diseases so that their long-term chances of survival are decreased. On top of this come toxic side-effects.

Work is continuing in all parts of the world to find new ways to transplant without risk. The simplest way to restore sick organs back to health is to take them out, repair them and then put them back into the body. This is theoretically possible now that Professor Thiele, the Kiel chemist, has discovered structural principles of macromolecules in organic tissue. This is however not yet possible as copying the structures of even the simplest organs seems extraordinarily difficult.

For this reason most interest is focused on the development of new methods to check the body's rejection mechanisms without causing a general lack of defence so that the recipient runs the risk of infection. A method must be developed that restrains only the rejection of the donor's protein.

Basically new ideas on this theme came from the British Nobel prizewinner Medawar at the beginning of the fifties. He tried to rid the body of this rejection mechanism before the organ transplant by introducing certain cells from the donor into the recipient's body so that it could under certain pre-conditions accustom itself to them.

A large number of laboratories—some very important ones in Britain and the United States—are working in this sphere of decisive importance for the future of organ transplants. Some success has been recorded but they do have the disadvantage for practical use that the cellular material necessary for preliminary treatment must be obtained by killing injured

animals of the same stock (such as twins from the same egg).

On the other hand Kiel University's department of hygiene and microbiology seem to have succeeded in finding a way to restrain the recipient's specific rejection mechanisms against potential donors.

Dr Müller-Rucholtz, chief assistant of the departmental head, Professor Gärtner, is working on this procedure with Dr H.G. Sonntag. He stated that they hoped to restrain rejection in their experiment by cross blood transfusions and at the same time take into consideration aspects that are a pre-requisite in treating humans.

This process is based on the discovery that the main agents of the rejection mechanism against foreign tissue are the lymphocytes, a sort of white corpuscle that makes up one third of the total of white corpuscles in humans. Lymphocytes destroy foreign tissue and their special function can be passed on as it is now known that they multiply, in contrast to red corpuscles. If lymphocytes and other white blood cells can be transferred from one organism to another without them being destroyed as alien protein the rejection mechanism will not react against further protein from the donor and tissue or organs can be transplanted to the recipient.

So far the two Kiel researchers have tested this process on laboratory rats. The neutralisation of the rejection mechanism was achieved through blood transfusions. The blood of the future recipient and donor was completely exchanged so that after the transfusion each animal had fifty per cent of its own blood and fifty per cent of the other animal's blood together with the white corpuscles and lymphocytes. The veins and arteries of the animals being used in the experiment are connected with each other.

Before and after the transfusion the rejection mechanism is neutralised temporarily for a few days with the aid of cytostatic. Cyclophosphamide was used for this experiment. The transfusion of the two millilitres of blood took several hours. Twenty minutes would have sufficed for the blood transfusion but the lymphocytes too had to be exchanged. Some of the lymphocytes would have been circulating outside of the blood stream during the short transfusion and would return into the bloodstream only later. The body's own lymphocytes would then have the upper hand and could wipe out the foreign lymphocytes so that the rejection system would function again as soon as the chemical neutralisation wore off.

Transplant experiments carried out after the cross transfusions indicate that a neutralisation of the rejection mechanism in this way is possible. The rats each received a piece of the other animal's skin and skin from another rat.

Many pairs of animals were used in the experiment and it proved that the skin tissue of the partner animal was accepted as if it has been the recipient's own tissue. The tissue of other animals was rejected. It could be said that the rats whose blood is transfused become blood brothers.

Some of the animals treated in this way were observed until their natural death four hundred days later. The alien skin tissue was not rejected. If it had been the animal's hair would have fallen out of the parts of the skin affected.

These successes show that it is perfectly possible to transplant tissue and organs from one organism to another without the tissue having to be continually guarded against the rejection mechanism. They also show that this process could be repeated in a hospital, even though the cross blood transfusion before the actual

organ transplant may seem to raise complications and problems.

But there is a long way between present experiments and the application of the results in hospitals. Up till now tests have been made only on rats from inbred stock. They are related to a certain degree and their body protein is similar. Now the Kiel researchers are going to develop the process in more distantly related animals with varying protein structures in order to eliminate the risks in neutralising rejection mechanisms.

Some time will pass before the process can be used on larger mammals and possibly Man himself. Once again the proposed Primate Centre—a decision has still to be taken to set it up—would have been of great importance in the preliminary stages of this development.

Harald Strehlert

STUTTGARTER ZEITUNG, 2 December 1969

## X-ray pictures without X-rays

Ultra-soundwaves can now help radioscopy produce X-ray photographs without using X-rays.

The Photographic Industry Association announced in Frankfurt that the Siemens concern has developed new equipment that does not require X-rays to photograph the inside of the human body.

According to the Association the equipment consists of transmitter and receiver. The transmitter emits a series of ultra-sound impulses that are then reflected by solid objects in the body and return to the receiver. The returning signals are changed into light impulses and reproduced on a screen to give the photograph.

This new sort of X-ray will be of great use primarily in gynaecology and obstetrics and in any field where the doctor wishes to cut down radiation.

STUTTGARTER ZEITUNG, 2 December 1969

## Clinic without a chief physician

DISPOSING OF MEDICAL AUTHORITARIANISM

A special type of hospital has just been authorised by Werner Fiegen, the Minister of Labour and Social Welfare in North Rhine-Westphalia.

A few days ago in Herdecke on the Ruhr between Dortmund and Hagen patients moved into a hospital that has no chief physician or superintendent and never will have if the founders have their way. The twelve doctors will sit on a council to decide on matters concerning the hospital.

The youngest of them, Dr Wolfgang Schilly is only 31 years old. The oldest, Dr Anselm Basold is only seventeen years older. Their idea was conceived years ago and they have now achieved something that only they at first believed in.

They built a hospital costing of 7.5 million Marks. The federal state of North Rhine-Westphalia covered them to the tune of 2.5 millions. The rest was raised mainly by the doctors themselves. They went to the credit market and finally found friends to combine into a sponsoring group consisting of only 35 people.

The twelve doctors want to prove that they can run their affairs better without a medical superintendent. They also want to prove that this system is financially practical.

It started with the doctors signing a contract that meant that they had to raise only 30,000 Marks for a hospital bed whereas normally double is needed. The

doctors admit that it would not work out quite as cheaply today. They drew up the contracts at the time of the economic recession.

The hospital is situated in the foothills of the Sauerland. Three large, attractive buildings stand alone in the surrounding countryside. The Herdecke suburb of Westende is an ideal place to convalesce. And the twelve doctors will pay plenty of attention to convalescence.

They found their nurses in the same way that they raised their money. They still money remaining it will be used for research in their own hospital.

The doctors are optimistic. They all work on an employee basis for a monthly wage between three and four thousand Marks. They live in detached houses built with a 750,000 mark mortgage from the Federal state. They are not allowed to sell the houses.

The new cooperative hospital in Herdecke has 200 beds but the doctors plan to a further 180 beds to establish a hospital better suited to ease the present situation. This second stage will be completed in the next few years.

"We are replacing the superintendent with a team," said Dr Schilly. "We meet and listen to the other doctors' opinions. We agree on the basis of what we know and act accordingly." The young doctor pointed out that all on the team had experience as senior doctors and specialists.

(Frankfurter Neue Presse, 28 November 1969)

## A LUCKY CATCH...

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## ■ THE ECONOMY

**The risks of a new recession**POLICY COOPERATION CALLED FOR BETWEEN STATES  
AND CENTRAL GOVERNMENT

A "strategy of conflict" will bring employees in the Federal Republic no advantages during 1970 since higher net wages can only be brought about by high unemployment figures as a result of redundancy.

This view was expressed by the expert's advisory committee for the supervision of economic development in its sixth annual report which was released to the press in Bonn 3 December 1969.

The report was completed on 19 November by four experts, namely Manfred Schäfer and Professors Wilhelm Bauer, Herbert Giersch and Norbert Kloten. It is being published by Kohlhammer of Stuttgart.

The experts' analysis claims that this country's economy is going through the boom period of its fifth growth cycle in late 1969. The situation is characterised by heavy demand symptomatic of a boom, wages demands as a result of this and rapidly increasing prices.

According to the experts if this super-boom of 1969 is not to be followed by economic doldrums in 1970 a policy must be devised to keep incomes under control in the first half of 1970. Herein lies the task for which the State and the autonomous group of concerted action must cooperate.

The report states: "It is a question of finding a peaceful manner of avoiding a possible wages war and creating a level of national net wages which is as high as possible for the foreseeable future."

It is thought that the revaluation of the Mark has increased the risk to further economic development in the Federal Republic.

The demand has still not yet gone out to the trade unions that they must continue to exercise restraint in their wage and salary demands so that the economy is not imperilled. At least it has not gone out officially.

And anyone who can add together two and two expects the demand to be made as certainly as the sun rises.

Retiring Bundesbank president Karl Blessing has already stated: "If wages and prices continue to rise at the present tempo the Bundesbank will be forced once again to resort to punitive measures as in 1966. This would lead to a considerable cooling down of the overheated economy."

Once again it is a Social Democratic Economic Affairs Minister who has had to serve this bitter pill to the unions in his concerted action. In 1967 when it was a question of giving the economy a boost and ensuring jobs Karl Schiller was able to convince them that at long last industrialists' profits must go up so that they would again take courage to invest.

As a compensating factor for this he promised employees "social symmetry". It has never been explained what Karl Schiller really meant by this promise. But the fact is that in the following year wages rose by only about five per cent whereas industrialists' profits climbed by almost 22 per cent.

Since then there has been some noisy quarrelling for the employees' back pay, which cannot be settled by making the situation in this year once again in favour of the employees.

Neither can it be settled by the Ministry's forecast which is almost in agreement with the unions' and industrialists' that acting on data available at present gross wages in the coming year would go up by eleven per cent but industrialists' profits

**DIE WELT**

UNABHÄNGIGE TAGESZEITUNG FÜR DEUTSCHLAND

This was stated very clearly in the annual report of the independent committee of experts, published recently in Bonn.

Uncertainties in the prognosis strengthen the risk in economic policy. One of the main dangers is very sharply outlined, that is to say that soaring prices and incomes may continue as a cumulative process throughout 1970.

Following the bitter experience of this autumn's wildcat strikes, which unleashed a spate of wage demands, nobody will try to deny the statement made by the experts that price rises over a wide range of goods can easily give rise to chain reactions in wage policy.

A development of this nature would undoubtedly force the Bundesbank to continue its restrictions to credit.

In this light the danger of renewed economic doldrums must not be overlooked on any account.

In the face of such dangers the advisory board has harked back to an idea, which it put forward in vain in 1965 to try to combat a similar situation.

Is has called for a peaceful strategy of preventive income security for 1970-71. It has pointed out most emphatically that a new battle over incomes would have no advantages for either side, since after the incomes war this autumn the relationship between salaries and profits once again corresponds to a relatively static level of employment.

**Giving the working man  
a fair deal in 1970**

would only climb by four per cent in this period.

Would this not set everything to rights? Would not this cover "back pay"?

At this point Blessing's ideas can be taken into account. He has said that in the long run wage increases which are greater than the growth rate for productivity cannot be implemented without effects on prices. Who wants to and who can prevent higher wages affecting prices and thus introducing that development which ends up with the Bundesbank slamming on the brakes, even at a time of an economic boom such as this?

Is it possible to speak pointedly at all about "back pay"? If unions claim back pay in one year then industrialists are going to claim it the next year. And each side would have a logical argument in its favour as long as the year of commencement were correctly chosen.

If the first year of the Federal Republic with its market economy is taken as the year of commencement then the individual employee has lost on his share of the national income, whereas the industrialist has gained. To express this in another way in 1950 the average worker's income was 33 per cent of the average industrialist's income. By 1967 this had dropped to 29.4 per cent.

This apportioning of national income naturally has its consequences for accumulation of capital wealth. The industrialists' and self-employed people's share

In the interests of securing jobs and a reasonably paced raising of actual incomes the wage developments over the whole of the economy during the course of 1970 should orientate on a seven per cent figure.

The first round of talks since the recommencement of "concerted action", the discussions between Economic Affairs Minister Karl Schiller and industrialists and unions has shown already that it will be very difficult to come to an agreement on such an idea, based on the experiences of the past.

Economic policy must make the limitations of the dangers clearer to the autonomous groups.

The annual report would have helped such a policy on its way more if it had been more carefully formulated. Obviously the experts themselves had a very tough time estimating economic trends in the foreseeable future. They ascertained that the outcome of revaluation could not be evaluated simply.

In the first chapter doubts are expressed whether revaluation swept aside not only the cost and price disparity with other countries but also certain protective measures. Later on in the report it is suggested that there should be negotiations for a preventive securing of income "to act as an immediate test to see if revaluation has or has not caused a danger of price rises occasioned by extra economic means."

The advisory board has described financial policy for 1970 as "still largely unsettled" but at the same time it feels itself justified in assuming that the State will spend about 9.5 per cent more in

1970 and that therefore the trend in State spending would be slightly expansive.

An immediate cutting of State spending is necessary to take the pressure off the economy. But there are still other points unclear.

For politicians concerned with the economy and members of the public with a vested interest it would certainly have been more helpful if the advisory board in its annual report had dealt more with current problems. And it should have dispensed with new excursions into the theme of flexible exchange rates and well-oiled machinery for an "automated" economic policy.

Looking back over annual reports from previous years from the advisory board and the government's annual economic report it can be seen clearly that the problem of a preventive total taxation as an economic means is not primarily a decisive question.

A far-reaching consideration of faults in earlier economic prognoses is necessary. Better means are needed of recognising the situation and not so much directives on how to act and automated systems.

The advisory board itself must admit that many questions on this last point have still not been cleared up. Politicians will not be prepared to let automation oust them. But they must in a suitable position to orientate their actions on better criteria and they must be prepared to let themselves be measured thus.

In the present task of avoiding a new incomes war doubtful points were cleared up in the prognosis by corresponding tariff agreements. The aim of a measured prices and incomes policy will, however, only be reached with any degree of certainty when central and local government and the independent Bundesbank have introduced or alternatively maintain policy which is suited to the economic situation.

Karl Steyer

(DIE WELT, 4 December 1969)

capacity of the economy. Plans of how this could be done are under consideration. They would make the employee a mini-industrialist.

It is understandable why industrialists are not showing so much enthusiasm for these plans. After all it would mean their giving up in future something which to date has grown to their advantage as a matter of course.

But there is no surfeit of enthusiasm in the trade unions. They are not keen to see the workers supplied with a piece of paper which may well bring interest or dividends, but which is not ready cash and cannot be used to buy a washing machine.

For the unions it will be a difficult but absolutely essential task to bring home to their members that it is better for them to be in possession of documents, shares or investment certificates, which give them a vested interest in industry - not only in the profits side of it, either, but also in accumulation - than to receive an excessive wage rise and drink it away every evening in front of the television.

An ever recurrent theme when these matters are discussed is how one can expect a crisis to follow every time we extravagantly eat away too much of the earnings from our economy.

Warnings of an impending crisis and talk of social symmetry are Karl Schiller's means of persuading the unions to adopt a reasonable wages policy.

The unions will have to agree to negotiations if Schiller keeps his promise of bringing about, or bringing nearer, social symmetry by means of a active accumulation of capital wealth.

Or is it the worker, who was hit by the slump then hit by the boom, who must always be the whipping boy?

(DIE ZEIT, 5 December 1969)

## ■ BUSINESS

**Toy industry battles  
to increase sales  
and product quality****DIE WELT**

UNABHÄNGIGE TAGESZEITUNG FÜR DEUTSCHLAND

In the next few weeks before Christmas people in the Federal Republic will pay out about 600 million Marks to fill their children's stockings with toys. This is almost a half of the toy-manufacturers' total annual turnover.

This country's toy industry is expecting a ten per cent increase in turnover this year with a total production worth nearly 900 million Marks as opposed to 810 million before.

Of this a good third goes for export. But of the assortment of toys and games on offer in the shops of this country about one third is imported.

The toy industry will be raising its prices by about eight per cent on average next spring.

With a share of more than four-fifths Bavaria, Baden-Württemberg are considered the strongholds of the industry. The few companies in the industry employing more than 1,000 men and women are concentrated largely in Baden and Württemberg with such famous names as Schickel in Mannheim, Märklin Brothers in Göppingen and Margarete Steiff in Giengen/Brenz. The character of this industry is shown in the fact that seven hundred companies employ no more than 25,000 people and twenty branded names compete for half of the industry's turnover.

Originality and flexibility are thought to be the advantage of such small firms. Manufacturers point out quite rightly that it will be senseless for them to try to imitate the broad range of goods offered by the larger companies.

Smaller toy firms must keep up to date in the market. Up till now very few of them have understood how to operate joint measures which would help them to overcome their larger competitors.

Business advisers recommend that they should set up buyers' departments, market research centres and catalogues and employ travelling salesmen, advertising methods and window dressing on a common basis.

The industry has high wage costs of between thirty and fifty per cent of total production costs. The Federal Republic long since lost its position as the leading toy manufacturing country. Italy offers dolls, Britain match-box toy cars, Japan electric and electronic articles and Hong Kong all kinds of toys particularly in plastic.

This country's toy industry is still concentrating on miniaturising the adult world for children, making model spaceships, railways, cars, human figures and pedal cars.

A cautious change is about to be made. Marketing experts are employing teams of advisers to devise functional toys which are suitable for children over a large age group and can therefore follow one child through many of his formative years. A working committee of the toy industry in Bamberg is planning to make clear to trade, industry and science at the annual "Play Week" in June that learning by playing is an all-year round thing and not just intended for Christmas time, and furthermore that it is not confined to babyhood.

Whether it is true that toy purchasers can be persuaded to give toys not only at

Christmas, Easter and birthdays, but all the year round is as doubtful as the forecast that turnover in the industry will double before 1975. Between 1964 and 1968 turnover in the industry increased by 36.4 per cent.

The computer game which was a big hit last year in this country and abroad proved its worth financially. Games from the Ravensburg concern and toys from Dymik and Bad Tölz occupy children in pre-school years and help their development.

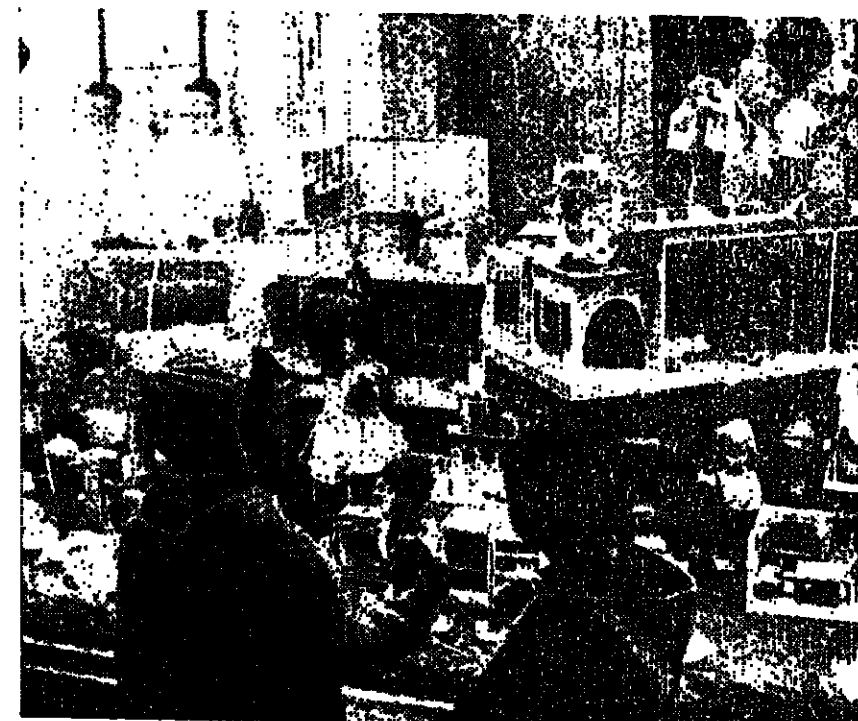
One of the most popular toys at present, the model motorway or racing track is being developed so that the cars no longer need to run on rails. This new version is considered to be a good device for teaching children driving.

There is no mistaking the trend towards the mechanical and electronic toy. Debates as to which materials should be used for toys are nearing their end: plastic, wood, metal and textiles as well as cardboard have all found their rightful place. War games, which are being offered in the German Democratic Republic as "Patriotic toys" make up less than one per cent of the trade.

Branded articles from Schickel, Märklin, Steiff, Falter, Fleischmann, Lego, Trix and others are usually sold direct to the retailer and are subject to retail price maintenance. Many mail order firms, including Bertelsmann, are specialising in toys and making great efforts to sell educational and instructional toys.

Unbranded articles usually find their way into the nursery via large stores. Special cheap offers are to be found in discount stores and supermarkets. One large Federal Republic toy manufacturer, Märklin, recently marketed a miniature railway of a very simple nature a new brand name "Primex", which is not subject to RPM and is on sale everywhere.

Specialist toy shops chose between 15,000 and 30,000 articles for their stock from a selection of over a million on the world market. Articles shown by toy manufacturers at the Nuremberg Toy Fair which will take place, from 14 to 20 February 1970 will be ordered in the spring making continuous production possible. But the regret of the industry it is not possible to take stock until 1 October.

Peter Morner  
(DIE WELT, 2 December 1969)

A child looking at wonderland - toys in a shop window!

(Photo: Cont-Press)

**Leisure wear the thing  
of the future**

The Cologne Fairs Committee has revived the "International Fashion Rendez-vous" for experts in the rag trade and it is intended to pave the way for a new market. Between 27 February and 1 March 1970 more than 200 firms will put their wares on show in Cologne and the emphasis will be on leisure-time wear and casual clothes.

The Fair is only intended for specialist purchasers from the trade. Clothes will be on show for the next autumn and winter season but there will also be the possibility to order stock for the next spring and summer trade.

Market researchers forecast a great development in the market for casual clothes during the seventies. The head of the Frankfurt Institute for textile market research, Dr Leichum, is expecting per capita consumption to double before 1975. By then about thirty per cent of all clothes purchases should be for leisure wear.

To date the younger age groups are the biggest consumer market for clothing but in the course of the next ten years this should change. By 1980 it is thought that the clothing market will have split down the middle and every other purchase will be leisure wear.

French couturier Jacques Esterel remarked when presenting some of his models for the future that in the seventies many of the distinctions between men's and women's clothing will disappear. In the future unisex will be the dominant factor.

The kind of suit which most men wear nowadays is, Esterel complained already 170 years out of date.

Professor Haseloff of the Sigma Institute in Berlin was also of the opinion that

**Industriekurier**

leisure-time wear was the thing of the future but he warned against analyses of future trends that were not detailed enough.

In spite of the prominence of leisure time wear in the recent past Haseloff ascribes the present situation to a kind of failure on the part of clothes designers. In his opinion fashions should be dictated by people's activities and up till now the rag trade had failed to carry out a functional analysis of what is meant by leisure time. The question must be asked what people really do in the leisure time.

Dress designers and men's clothing designers should bear in mind that about ten to fifteen per cent of clothes' purchasers were ready to accept new creations but only about 1.5 per cent were ready to wear extravagant and outrageous designs. Therefore what was put on show was often of little interest to 98 to 99 per cent of the people who saw it.

Haseloff called for circumspection on the part of buyers in the textile industry. According to the professor fashions only really stood a chance when they were a manifestation of a new attitude towards life, the mini-skirt being the most obvious example. He said that theseventies would offer all manufacturers and designers who were able to overcome problems connected with marketing leisure wear excellent opportunities for better sales.

The new Cologne fashions fair would be the first acid test of this.

(Industriekurier, 27 November 1969)

**Russian gas for this country**Frankfurter Allgemeine  
ZEITUNG FÜR DEUTSCHLAND

which the signing of the contract depends are still unsettled. It is generally thought that the introduction of Russian gas will take the pressure off prices of this country's domestic gas supply.

The total delivery period is fixed at twenty years. It is expected that in this time the amount of gas imported will remain fairly constant. The natural gas will be piped from the Soviet Union through Czechoslovakia and will arrive at Ruhr Gas installations on the Federal Republic-Czech border.

A date has not yet been fixed for signing the treaty. After signature of the contract acceptance by boards in both countries will be necessary before it takes effect.

(Frankfurter Allgemeine Zeitung für Deutschland, 1 December 1969)

One or two individual problems on

## OCEANOGRAPHY

# Marine research to protect North Sea coastline

Plans for a permanent network of oceanographic measuring stations on the high seas in the form of radio-equipped buoys anchored off the coast of the Federal Republic of Germany are taking shape.

The network will form only part of comprehensive planning for inspection of the sea off German coasts.

Immediate coastal waters, which are for the time being the region of principal interest for transport, hydraulics and part of the fishing industry, are to be equipped with a network of measuring stations of their own.

Equally up-to-date, the off-shore network will be linked to the chain of buoys further out. Within the foreseeable future the coast, particularly the North Sea coast, will be covered by such an effective network of measuring stations that surprise floods will no longer be possible.

Ominous flood and wind waves will be observed and recorded far off shore and exact forecasts of storm conditions will be possible.

What is more, there will be a scientific basis for hydraulic and civil engineering projects in coastal areas as regards the major outlines of coastal development, alluvial movements and currents. It ought then to be possible to avoid expensive mistakes.

A classic example of misplanning was the Schleswig-Holstein Eider barrage, built shortly before the war. It was so poorly located that a second barrage must now be built at a cost of many millions of Marks.

Safeguarding the island of Sylt, which is breaking up at the moment, will also not prove completely successful until detailed and exact information on cur-

**Handelsblatt**  
Handels- und Wirtschafts-  
Zeitung

rents and alluvial movements off-shore is available.

The Coastal Committee for the North Sea and the Baltic has estimated that the capital outlay needed to carry out the necessary protective measures will be somewhere in the region of 14,000 million Marks. Amongst other things this sum is at stake.

Our knowledge of the dynamics of ocean and coastal waters is fragmentary in the extreme. Movements of sea water are known only from spot measurements taken by research vessels. Parameter variability is far greater than was assumed as recently as a decade ago.

These changes are to be recorded by an automated network of surface measuring stations extending far out into the North Sea and maintained by the Federal Republic Hydrographic Institute.

Coastal water movements are equally changeable, particularly off the complex North Sea coast of Germany. Only an extremely dense and extensive network of measuring buoys as proposed by Dr Lorenzen, chairman of the committee, could possibly provide a comprehensive record of the influence brought to bear by the various individual factors involved.

A partial survey of alluvial movements in off-shore regions is being carried out at the moment under the auspices of the Federal Republic Research Association under the code name "Sandwanderung."

The development of ocean waves, a crucial factor in all oceanographic processes, is being investigated as part of another international research programme by Professor Walden of the Federal Republic Hydrographic Institute and Professor Hasselmann of Hamburg University.

Following the compilation of extensive data off Sylt this summer, using a network of gauges, buoys and vessels stationed up to fifty miles out, it is hoped that mathematical and physical study of wave development will make possible forecasts of the height of waves to be expected.

Most progress has been made in attempts to compile surface records of oceanographic parameters in the Baltic. For some years Kiel University marine research department has boasted a network of automatic measuring masts on the high seas. The data recorded does,

however, have to be collected every so often.

In the near future a network of radio-equipped buoys is likely to be set up in the Baltic, albeit for special purposes. A prototype high seas buoy designed by Hagenok, a Kiel firm, with special attention paid to stability even in heavy seas is undergoing trials in Eckernförde bay.

The mere size of the prototype (52 ft 6 in. high, weight six tons) conveys some idea of the technology that must go into ensuring that it remains an effective measuring device.

For the Federal Republic Hydrographic Institute Dornier Systems have carried out a study as a result of which a prototype is to be selected. Trials will commence in about three years.

Imaginative proposals have been made. The institute is considering a type that works mostly under water, so being no hindrance to shipping, and surfaces now and again to radio measurements to base.

A satisfactory long-term still has to be found where communications with the high-sea network are concerned. Aircraft could scout round the region once or twice a day. Telecommunications satellites could even cull the information.

The idea of satellite supervision is as unlikely as may seem to be the case. This country's network of observer buoys is not in isolated phenomenon; it will fit up with IGOS, the international oceanographic measurement programme covering the entire Atlantic, a project big enough to warrant the launching of a special control satellite.

For this country's own network it is hoped to install a permanent artificial island north-west of Heligoland, according to Dr Weidemann of the hydrographic institute.

All being well, the island will be a disused oil rig belonging to this country's North Sea consortium. At the moment the platform is dismantled and in storage.

For a certain period of time this island station would complement the buoy network in taking standard measurements from a manned survey-point. A control platform is not only essential for checking the accuracy of observer buoy measurements; it would also prove extremely valuable in checking pollution of the North Sea.

Harald Steiner  
(Handelsblatt, 3 December 1969)

## A bungalow town to use space economically at Hanover

In time for next April's Hanover Fair a construction project that represents something out of the ordinary, a bungalow town on the roof of the largest exhibition hall in the world, will be completed. Bungalow town will consist of 752 apartments, shops, kiosks and more than three miles of roads.

The first units were recently erected by a construction firm specialising in prefabricated aluminium sections and shown to the public. The entire project is to be completed in one operation.

Roughly 350 units of 276 square feet selling at 11,900 Marks have already found a buyer. If several standard bungalows are bought as one unit the lot price is only 8,000 Marks. Negotiations are still in progress for a further 150 units.

The initial reason for this unique project was a demand made by the office machinery industry to the fair authorities in Hanover that their 600,000 square feet of exhibition space be arranged on a single level, otherwise they would stop exhibiting.

As soon as this year's Fair ended work began on a gigantic new exhibition hall on the site of what has in past years been

a parking lot. The new hall is little short of a million square feet in size (300,000 square metres) and built on stout concrete pillars.

The site is on a slope but the exhibition hall has been kept horizontal, which has the advantage of rescuing much of the parking lot. There is still place for 2,000 cars underneath the hall; and on top, over an area the size of sixteen football pitches, there was originally to be a heliport. There were even plans to make the roof an airport runway but this would have made the project far too expensive.

As a result the fair authorities finally hit upon the idea of building an exhibition village on the roof. Exhibitors have lamented for years that accommodation is in too short supply during the Fair for night, especially when the aviation show is held at the same time, which happens every other year.

There are too few hotel rooms and still fewer rooms in which negotiations with potential customers can be conducted, exhibitors have already bought entire blocks of roof units.

In a number of cases the firms in question are local firms that intend to keep their rooftop offices in action all the year round.

The estate is crossed by five concrete-surfaced roads in an east-west direction and by sixteen roads going north-south. All have street lighting and the roof has its own refuse disposal squad.

Residents who would like their bungalows to be cleaned daily, including the washing-up, can call on the services of a firm of charladies.

There will be three restaurants specialising in serving breakfast, a self-service store, kiosks, slot machines, a hairdresser's and a laundry and dry cleaner's, too.

(Frankfurter Allgemeine Zeitung für Deutschland, 3 December 1969)

Bungalows built on the roof of the Hanover Fair exhibition halls  
(Photo: dpa)

## TECHNOLOGY

# Electronics for the eighties

PHILIPS' RESEARCH PROGRAMME PAYS OFF IN PATENTS

"You really ought to have a look at what we have cooking," said Professor H.B.G. Casimir, the holder of honorary degrees at any number of European universities, ex-associate of Niels Bohr and in his present position as a director of Philips responsible for basic research at an international firm.

He was talking to a group of European science journalists at the opening of an exhibition organised on behalf of the six Philips research laboratories at Eindhoven, Holland.

Models, original components, diagrams and a number of demonstrations illustrate 110 research projects. The main purpose of the exhibition is to show Philips employees what their research staff do and what happens to the money that is ploughed into research projects.

At Philips more than 1.5 per cent of turnover goes into research. This percentage, when all is said and done, amounts to more than 150 million Marks a year.

As at other large firms of comparable size research and development at Philips are separate. Development work is carried out by the individual divisions of the firm. It has one ear to the market, is directly related to the product requirements and subject to a variety of deadlines.

Research, on the other hand, is fairly independent once the fundamental decisions have been taken by the board of directors.

In line with the firm's multinational policies research is carried out in a num-

ber of countries. Eindhoven remains the centre of research and a second laboratory skyscraper was recently opened there. Research facilities at Eindhoven account for roughly fifty per cent of the firm's potential. The remainder consists of two laboratories in this country (Aachen and Hamburg) and facilities in Belgium, Britain and France.

Philips' research exhibition cost money to arrange and time to organise and is, of course, not restricted solely to employees of the firm. It is also open to major customers, the authorities, the press and, to a certain extent, competing firms, which are often either customers or partners.

It conveyed an impression of the great variety of sectors in which Philips research scientists are at work. "It really isn't easy always to decide on the right direction," president Frits Philips confided in a private chat.

The exhibition was divided into eleven sections ranging from the bases of telecommunications, technology, scientific instrumentation, light and optics, medical electronics, display arrangements, computer and semiconductor technology and space research to mechanical developments such as the Philips spiral bearing and the Stirling machine.

Much of what was on show was pure research. Immediate applications were not always evident. On the other hand the organisers have taken care to ensure that the overwhelming majority of exhibi-

bits bear some relationship to market requirements.

Take, for example, the piezoelectric clock, which one of these days will replace the old-style timepiece. Its drive element is uncommonly simple. Fifty-hertz AC grid current makes a minute piece of piezoelectric material oscillate. At the vibrating end a tiny spring works a cog at fifty-hertz rhythm. With the aid of a few other cogs the clock functions at the exact speed of the current, even developing a mechanical energy of 0.3 watts.

The exhibition conveyed the impression that optical problems, those of the laser, for instance, are increasingly moving into the electronic sector.

There were a fair number of newly-developed devices such as equipment for the reproduction of thermocouples of the human body and extremely flat screens consisting of gas discharge particles.

There was a most impressive demonstration of a new photographic tube with a light-sensitive layer consisting of 500,000 photodiodes. Extremely sensitive to infrared light, the tube was developed specially for night vision.

(Texas Instruments, RCA and AEG-Telefunken are working on similar developments, following the lead given by Bell Laboratories.)

The new tube was demonstrated in a videophone. Its great sensitivity to light was impressive indeed. Bright flashes of light seemed to give it no trouble at all.

In the acoustics sector a horn loud-

speaker caught the eye. By virtue of newly-developed acoustic chambers the size can be reduced considerably without having the slightest effect on the loud-speaker's performance. Another arrangement produced a musical scale accurate to 0.05 % for tuning musical instruments electronically.

A new method of large-screen television projection was particularly interesting. At present, apart from experimental laser arrangements, only the eidophore with streak optics could compete but although it reproduces colour television satisfactorily too it is an expensive procedure.

Philips use a special tube with a crystal screen maintained at Curie point (-55 degrees centigrade) by a Peltier element. There is a lattice parallel to the screen and 120-volt video tension is applied to both. As a result of the Pockels effect a charged picture corresponding to the transmission is formed.

In front of the tube in the direction of the projection surface there is a calcium crystal ray splitter fed from below with the bright light of a 1,000-watt mercury vapour lamp. In the ray splitter light is superimposed on the picture and the result is a sufficiently bright, distinct television picture then square metres in size.

As in the eidophore system the size and brightness of the picture are mainly dependent on the external light source and not on the brightness of the picture as formed on the screen. With the aid of a 2,500-watt xenon lamp Philips hope soon to be able to produce a television picture forty square metres in size.

Another interesting development was a device for colouring X-rays by TV. Parts of the exposure that are not needed can virtually be expunged, others emphasised by up to three colours.

Karl Teizner

(Handelsblatt, 3 December 1969)

## Cat's eye warning system for icy road conditions

Battelle of Frankfurt recently unveiled a black ice early warning system based on cat's eye reflectors. A temperature-sensitive filter makes the reflector appear green in car headlights when the ground temperature is seven degrees centigrade or more, amber in temperatures between three and seven and orange-red when the temperature is around freezing-point.

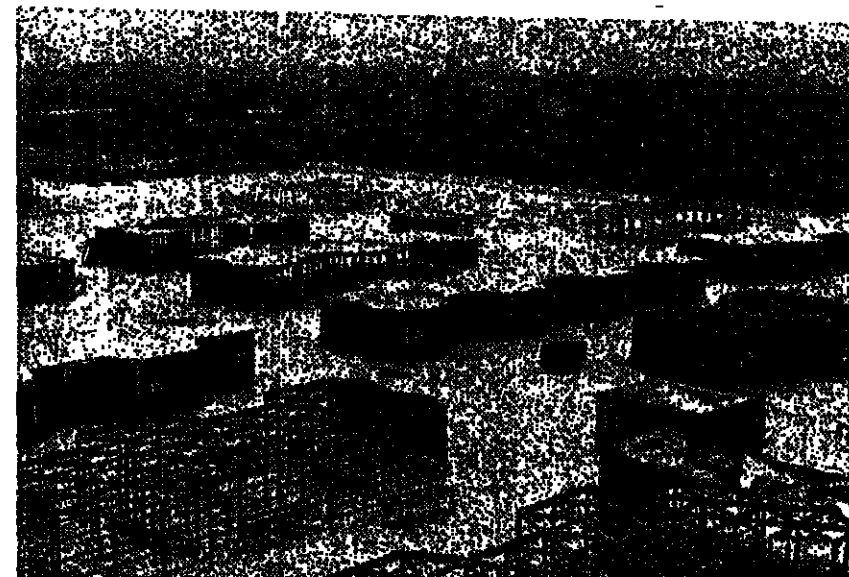
Reflectors can be fitted to the posts at the side of the road and even during daylight a motorist need only switch on his headlights for a moment to check the temperature and the likelihood of black ice.

This system has already been patented in France, Italy, Britain and Austria and patents have been applied for in five other countries, including the Federal Republic. It will be a useful addition to the black ice warning signs already in use.

At less than five Marks per reflector the cost of equipping all roads outside built-up areas with the early warning device is estimated to be almost exactly forty million Marks.

Spokesmen for the Battelle Institute noted that snow and black ice account for 54,000 road accidents a year. Six hundred people die and 19,000 are injured as a result and the cost in terms of men and materials amounts to 400 million Marks or so.

(Die Welt, 3 December 1969)



**Frankfurter Allgemeine**  
ZEITUNG FÜR DEUTSCHLAND

## One of the world's top ten

When a newspaper ranks as one of the ten best in the world, both its coverage and its editorial contents assume international significance. Twice the Frankfurter Allgemeine Zeitung has been named one of the ten best newspapers of the world. The first time, in 1963, by professors of the Journalism Department of Syracuse University in New York. The second time, in 1964, by the professors of 26 institutes in the United States.

"Zeitung für Deutschland" ("Newspaper for Germany") is a designation that reflects both the Frankfurter Allgemeine's underlying purpose and, more literally, its circulation — which covers West Berlin and the whole of the Federal Republic. In addition to 140 editors and correspondents of its own, the paper has 450

"stringers" reporting from all over Germany and around the world. 280,000 copies are printed daily, of which 210,000 go to subscribers. 20,000 are distributed abroad, and the balance is sold on newsstands. Every issue is read by at least four or five persons. Frankfurter Allgemeine Zeitung is the paper of the businessman and the politician, and indeed of everyone who matters in the Federal Republic.

For anyone wishing to penetrate the German market, the Frankfurter Allgemeine is a must. In a country of many famous newspapers its authority, scope, and influence can be matched only at an international level.

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## ■ OUR WORLD

This country's pavilion  
at Expo 70 in Osaka

Federal Republic Building Directors, Berlin, make their plans at their headquarters near the River Spree and build for this country in this country and abroad. Sometimes they build schools, or embassies, or as most recently, the pavilion at the world exhibition in Japan.

The latest task of the builders is at "Expo 70" in Osaka. This started with a competition, then work began in autumn 1968 and now the date for completion is no longer just a dream. On 15 March 1970 the Federal Republic will present a building which is individualist, inside and out.

Berlin architect and engineer Fritz Bornemann won a prize for his design which has been followed closely. Bornemann has already been responsible for the design of many famous buildings, including the Deutsche Oper in Berlin, the Freie Volksbühne theatre in Berlin among others and he has also written his name on the Hanover Schauspielhaus and the Cairo Opera House.

Many original plans for Osaka have been altered. A few months ago it was planned to have dancing dolls in the pavilion, but instead it is now intended to

Kieler Nachrichten  
Landeszeitung für Schleswig-Holstein

have mechanical, abstract animated games with unusual lighting effects.

For Expo 70 this country has allowed 11 million Marks. It was a only rumour that as much as 40 million Marks would be on hand.

Berlin sent three building directors to supervise work on the Expo site. They are Hermann Bohnenkamp, Klaus Herrmann and Ortwin Dittberner.

These men have said that Japanese craftsmen are vital to them. They find the Japanese workers punctual, reliable and zealous.

Fritz Bornemann is the kingpin of the operation, but he has staff of designers from the Federal Republic at his side.

The dominant feature on the site will be a cupola, about 65 feet high. This will be built in steel and its outer covering will be blue. It will contain a spectacular in sound and colour. The auditorium will seat 700, and projectors will make constantly changing effects which will light up then disappear. The optical side of this psychedelic show will be enhanced by music.

There will be four subterranean pavilions each with a diameter of about 90 feet. Expo 70 will have music playing between screens placed on the walls and there will also be escalators capable of carrying 3,000 visitors per hour.

This country's flora will be exhibited representing the season of the year.

The themes of the exhibition will be landscape, work and culture. We will exhibit articles of which our industry can be truly proud, giving the exhibition great value for the economy.

Information is not everything. On the terraces there will be typically German restaurants with beer, wine and coffee with cakes. Quietness will be the order of the day here.

This country's pavilion at the Brussels World Fair was extremely frigid and utilitarian. It was admired very much, but also severely criticised.

In Osaka it is intended to get away from the little boxes or skyscraper idea will this well-designed dome. Attempts have been made to be different and the signs are that most countries will try something new of their own.

(Kieler Nachrichten, 3 December 1969)

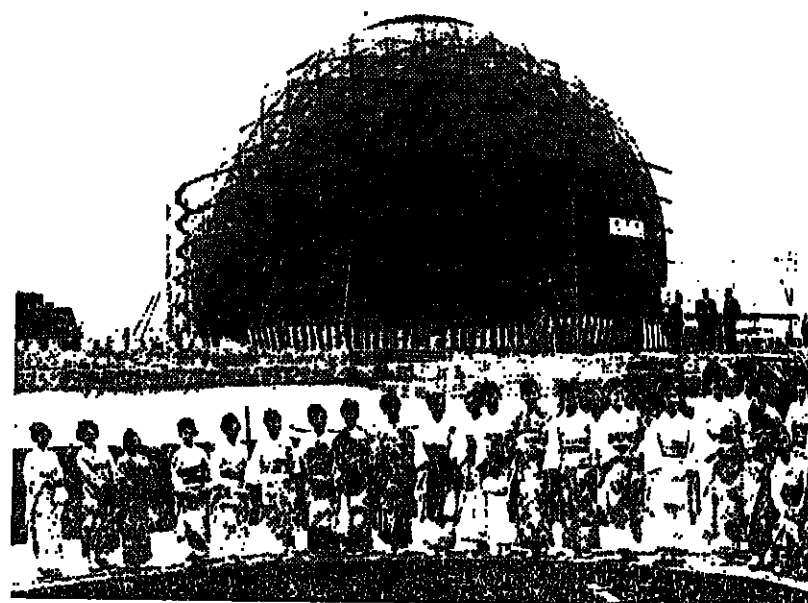
Radio-picture  
network  
to aid the police

Attempts by the central government and Federal state governments to come to an agreement on building an extensive radio-photograph network to aid the work of the crime have met with success.

Federal Minister of the Interior Hans-Dietrich Genscher, speaking in the Bundestag recently, said that he had advised the ministers of Federal states to set up this network within the next year.

The network will be rented from the Post Office and its headquarters will be at the General Republic criminal investigation office in Wiesbaden.

(Frankfurter Rundschau, 27 November 1969)



Federal Republic pavilion nearing completion

(Photo: Marianne von der Lant)

37 tons of air mail handled  
nightly at Frankfurt airport

There is no more bustle in the spacious halls of Frankfurt's airport. The last airliner with passengers has been sent off on its way. The new day is only a few minutes old. But now there is activity at the approaches to the airport. Headlights flash turning the night into day. The ground personnel are waiting for the jets to fly in from eight cities in the Federal Republic. The planners are operating this country's inner postal service network, that has been functioning since 1 September 1961 and whose central sorting office is Frankfurt.

Like a shadowy ghost an aircraft touches down and rolls to the unloading bays. One after another the other planes arrive and taxi into their positions marked by white crosses on the ground.

The apparently sleeping airport springs into life. The night air mail has to be unloaded. Crudely painted cars pass from plane to plane and petrol tankers race over the landing strips to the machines. Mechanics in white overalls check the engines and the unloading crew set to work. The post bags are thrown out and sorted into the post vans that are standing by.

An official of the postal service said: "Thirty-seven tons of mail, that is about two million letters, are unloaded daily at the airport." Everything has to be done in double quick time so that the aircraft can

again get into the air and keep to the flight schedules.

The postal service network is operated by seven planes from Lufthansa and one from Pan American Airways. The service is in operation from Monday to Friday. The postal service pays out approximately eight million Marks for this service every year. Every night about 35,000 Marks are spent. Every day the planes fly about 2,500 miles, just about the distance from Düsseldorf to Las Palmas.

A postal services spokesman said: "The entire consignments handled in one evening were piled one on top of the other the stack would be twelve times taller than Cologne Cathedral."

Statistics show that in 1968 approximately 10,100 tons of mail were handled over the postal air service.

Every evening about 8.7 tons of mail arrive at Frankfurt of which about 7.1 tons are re-shipped by the night postal service to other parts of the country.

Letters posted late at night near the airport and in the airport reach their destination the following day about midday. Thus a letter posted in Hamburg late at night would be in Bayreuth by midday on the following day.

"Few people realise that letters travel many hundreds of miles packed in sacks and placed in the covered sea of a passenger aircraft. The changeover is quickly done," a post office spokesman commented, "so that the planes are ready to work the nightly postal service, set up to receive the bags of post. With the aid of a mobile crane the round receptacles, containers they are called, are quickly stored away in the plane's belly."

The loading and unloading is done at great speed. The high-screaming plane can then fly on to their next landing loaded with their freight. There the operation is repeated.

There are no traffic lights, as on land, to hamper the passage of the planes to their destination. It all works as if manipulated by an unreal hand.

About two in the morning the operation is all over, and the last plane disappears into the dark night. Only the howling of the turbines can be heard in the still night.

(Frankfurter Neue Presse, 3 December 1969)

Mail being loaded into a Lufthansa Boeing jet

(Photo: Lufthansa)

## ■ SPORT

Soccer trainers and players are  
troubled by brutal play

Frankfurter Allgemeine  
Zeitung für Deutschland

Top-flight international football is becoming an increasingly tough game; often rough would be the more appropriate word. On this point a number of well-known players, trainers and referees interviewed by *dpa* are agreed.

Most of them admit that the game is growing rougher. Large-scale incidents are usually awaited at next year's world championships in Mexico.

There are many reasons why an increasing number of footballers are giving a game that is generally felt to be the most popular in the world a bad reputation.

Increasing professionalism is largely to blame, Sepp Herberger feels. Helmut Schön lays the blame at the door of increasing national consciousness of the game. The trend is attributed by Helmut Schön to greater fighting power and a later tempo.

Karl-Heinz Schnellinger reckons there is a disastrous mutual influence that affects both players and spectators. Leo Lion maintains that poor referees are a contributory factor. Sepp Herberger again feels that society as a whole is becoming rougher, while Friedrich Seipelt claims that football is overestimated.

Encounters between club sides are frequently blood matches on which promotion or relegation depend and in which any means justifies the end of winning. The same is true of internationals, with the difference that what is at stake is not points but national prestige. The public expects their team to win.

"Many fouls that look dangerous," Helmut Schön, trainer of this country's national team, says, "can be attributed to the faster tempo of the game." Tempo has increased together with fitness. Players today are better trained and have more staying-power than ever before. The number of clashes on the pitch has increased accordingly.

Leo Lion, one of the best-known post-war referees, maintains that "referees have not kept pace with the development of modern football." And true enough, refs are often unable to keep up with the pace of the game.

They are also overburdened in other respects. Referees are the only amateurs in a professional sport, yet on occasion their decisions decide the fate of millions.

"Managers and trainers for whom success is the only thing that matters are to blame for increasing brutality," Lion continues. In addition the fans everywhere are indeed fanatics and often poison the atmosphere.

"I reckon there has never been a world championship that runs such a risk of catastrophe than Mexico. I hate to think what will happen if the referees, amateurs who have not kept up with the pace of modern football, prove a failure."

"Twenty days in Europe have proved

to me that European football has grown more violent," Brazilian trainer Joao Saldana says. I can tell you here and now that it will not be the football but the violence that will be the trouble at next year's world championships.

"A great deal of the blame lies at the door of a fanatical public that spurs the players on to give of their utmost," Sepp Herberger, veteran ex-trainer of this country, comments. "High bonuses and matches on which everything is supposed to depend lead many a player to overshoot the mark."

Trainer Helenio Herrera of AS Rome says "I attribute the growing roughness of football to its becoming increasingly athletic, increasingly powerful and at the same increasingly interesting. The result is that passions rise. There are a greater number of international fixtures involving an appeal to national pride too."

"There will be no world championship of brutality," counters Dr Helmut Kaeser, general secretary of FIFA, the international federation of football associations. "Trouble in international football mostly occurs where club interests come to the fore."

"Brutality is the wrong word for football, even though things happen in the course of the World Cup competition that cannot and must not be overlooked. Every country that will be represented in Mexico has been warned. FIFA will stand no nonsense should fairness go by the board."

"It is exaggerating to talk of brutality in football," Uwe Seeler, veteran international who is still captain of Hamburg SV, reckons. "Even so," he continues, "it is regrettable that the element of play is increasingly giving way to tough and sometimes ruthless effort."

"Football will also be in trouble if clubs continue to offer ridiculously high bonuses to spur the players on. FIFA won't half have to keep an eye on things at Mexico City."

"Never have I experienced such a brutal game as our World Cup fixture

## 25,000 hotel beds by Olympics' time

Visitors to the 1972 Olympic Games in Munich are to be offered not only private accommodation but also 25,000 hotel beds. Olympic press officer Hans Klein recently announced this following a discussion of the accommodation problem by the organising committee.

So far, though, firm bookings have only been made for the members of the International Olympic Committee. They will stay at the Vier Jahreszeiten, a first-rate hotel.

Some of the younger visitors will be housed in the projected youth camp consisting of 100-odd dormitory buildings.

On the other hand only 150 out of a total 1,000 participants in a scientific congress entitled "Sport in Our World:



The kind of rough scramble for the ball that causes soccer brutality on the pitch

(Photo: Nordbild)

1,262 schools  
participate in swimming  
competition

against Estudiantes in Argentina," says Karl-Heinz Schnellinger, German back with AC Milan. Even so, I object to the term brutality.

"Football has always been a decidedly manly sport. Mind you, fanaticism off the field often influences goings-on on the pitch. An appeal must be made to the players' common sense and to their sense of honour as professional men."

Friedrich Seipelt, chairman of the European Referees Commission, has the last word. "The top-flight player," he says, "has grown tougher. Unfortunately he has become more brutal too. Sport in general and football in particular is overestimated in importance."

"In many disciplines, not least in football, the aim is to win at any price. Exaggerated national interest also plays a part. And of course the financial factor is extremely important."

Increasing toughness could be counteracted, Seipelt feels, if referees were to be more forthright and make their decisions regardless of the player's name. Trainers and team aides should also school their charges not only with regard to technique but also with regard to character. Thirdly, FIFA ought to impose the necessary penalties.

(Frankfurter Allgemeine Zeitung für Deutschland, 5 December 1969)

Prospects and Problems" can be accommodated in the city itself.

Roughly two million people are expected to visit the Games. Two million Marks have been allocated for worldwide advertising, due to start next year.

To cater for visitors' food requirements two large restaurants, four cafes in Bavarian beer hall style, one restaurant with dancing and a number of kiosks are to be built on the Olympic site.

Three kindergartens are to provide parents with the opportunity of leaving their offspring in safe keeping for a few hours and information is to be available at four information offices with twenty windows each.

(Frankfurter Allgemeine Zeitung für Deutschland, 2 December 1969)

Despite laments about the wretched state schools sport is in 1969 has not been too bad a year in a number of respects, particularly where the swimmers are concerned, but generalisations cannot be made as a result.

The eighteenth schools swimming competition that has now come to a close justifies an optimistic view of likely future developments, though.

Eighteen years ago only a little over 100 schools participated and not one of them achieved the goal of teaching 100 per cent of pupils to swim unaided.

This year no fewer than 1,262 schools of all kinds took part and they represented a total of more than 100,000 school children. 132 of them were able to report 100-per-cent success in teaching their charges to swim.

Swimming is a primary form of physical education that in view of its many advantages is reckoned by many specialists to be the finest and most effective sporting discipline.

Quite apart from the physiological side it gives children the proud feeling of being able to master an alien element: water. Indeed, should danger threaten, schoolchildren can save lives. Swimming paves the way to the pleasures of water sports in leisure time and even to competitive sport.

First and foremost schools must teach their pupils to swim unaided. In order to provide a sporting incentive the schools swimming competition was started eighteen years ago. All schoolchildren in their final year are eligible.

The criterion is the percentage of swimmers, swimming unaided being defined as the ability to swim without a break for fifteen minutes after diving from the one-metre board.

This percentage is estimated on the basis of the total number of schoolchildren at all schools, a simple procedure that enables small schools to compete with larger ones on equal terms.

(Frankfurter Allgemeine Zeitung für Deutschland, 3 December 1969)



Mail being loaded into a Lufthansa Boeing jet

(Photo: Lufthansa)